

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph [01] of the originally filed patent application with the following rewritten paragraph:

The present invention relates to a network system. More particularly, the present invention relates to a system and a method for direct data placement of data for an application that uses a network protocol, such as TCP/IP, SNA and/or IPX₂.

Please replace the paragraph [03] of the originally filed patent application with the following rewritten paragraph:

The most popular conventional approach for improving TCP/IP performance is to offload the entire TCP/IP stack onto a network adapter. See, for example, U.S. Patent No. 6,434,620 B1 to L.B. Boucher et al. and U.S. Patent Application 20020161919 A1~~2002/016191 A1~~ to L.B. Boucher et al. Offloading the entire TCP/IP stack onto a network adapter has many advantages. For example, interrupt overhead for the host processor is reduced because there is only one interrupt per TCP message as opposed to one interrupt for each TCP segment. Offloading the entire TCP/IP stack also relieves the burden of TCP/IP processing from the host processor, particularly the copy-and-checksum processing overheads, and saves precious CPU cycles. Further, offloading the TCP/IP stack provides the opportunity for direct data placement on the receive path based on application header processing on the network adapter.

Please replace the paragraph [20] of the originally filed patent application with the following rewritten paragraph:

If₂ at step 207, IP fragmentation is not detected, flow continues to step 209 where the incoming TCP/IP packets do not match any pattern because there are out-of-order packets causing missing application headers. At step 209, the incoming TCP/IP packets are sent directly to the host TCP/IP stack for processing. At this point, the TCP/IP packet is subjected to the copy-and-checksum overhead. Alternatively, the out-of-order packets are buffered in network adapter 103. For high data rates, though, this alternative increases the memory requirements of network adapter 103.